

I feel sure that many people would be just as interested in lichens and mosses as they are in flowers, trees, and shrubs, if only there were a small simple handbook which everyday people could understand/ on the subject. There are many such books on flowering plants of our area, but none that I know of on mosses and lichens. This book is an attempt to fill that gap.

Common names have been used wherever possible, as they are easier to remember and more meaningful than the scientific names. However, names are not the most important thing --- one gets pleasure and joy by just being able to recognize a plant, or being able to find it in the book and reading up about it --- where it grows, what it looks like, its uses, etc.

Mosses and lichens are easy and fun to collect too. There are many ways to preserve them, but one of the best ways is to dry out the specimens thoroughly and place them in ordinary envelopes or in ~~folded~~ paper folded into an envelope. Wax sandwich bags can be used also, having the added advantage of being water-proof.

When collecting, one should be careful to write down the date when collected, the region, such as city, road, mountain or what have you, and the habitat, ~~such as~~ --- was it growing on rock? tree bark? sandy ground? <sup>was the area</sup> Was it shady or sunny? Was it dry or damp? All these things should be written on the outside of the envelope in a collection. As well as this, one should have the name of the lichen or moss and the name of the collector.

All these statistics may seem very unimportant at first, but they are all needed for the proper identification. Also, what if one got a very rare specimen somewhere? How would they know where or when to go and look for it if ~~these~~ this information isn't given?

When dried, mosses and lichens usually shrivel up and lose their colour to some extent, but they can be 'brought back to life' quickly and easily by pouring boiling water over them, or soaking them in cold water if boiling water is not available.

Whenever possible one should try to collect the fruiting bodies

and spore cases of their specimens, as they are sometimes the means of identification. A few mosses and lichens don't have spore cases, and reproduce entirely by vegetative means, but this is not the case with most of them.

Another way of collecting mosses and lichens is to press them lightly for a few ~~da~~ weeks in the same manner as flowering plants, and then fasten them with either glue or tape to pieces of cardboard and place the name tag on the bottom. This method is better for display purposes. The specimens should be pressed very lightly however, because the spore cases are damaged very easily.

Mosses and lichens make nice centerpieces and dish gardens, and they are a lovely substitute for flowers in the winter months.



4. LUNG LICHEN. - (*Lobaria pulmonaria*)

This is a very common lichen of our coast forests. The lobes are not rounded as in the *reptigera* species. The thallus is bright green when wet, and very light <sup>blue</sup> ~~yellowish~~ green when dried.

It is <sup>usually</sup> ~~always~~ found growing on trees (Broadleaf Maple is one of its favourites), although it is often found on the ground where it has been blown off a tree by the wind.

This species was supposed to be used as a cure for lung diseases in Medival times. It is edible, although very rubbery.

The fruiting bodies are not very often seen.



10. LETHARIA - (Letharia vulpina)

This beautiful lichen is similar in structure to Old Man's Beard, although the bright yellow-green colour makes recognition instant. It usually grows erect and very rarely hangs as Old Man's Beard does. It is very stiff and wirey.

Letharia is usually found growing on tree bark, old logs, fence posts, and so on. It prefers sunny, exposed places.

The apothecia, <sup>which are very rare here,</sup> ~~when present, and~~ are large and round. They are <sup>either</sup> situated <sup>just</sup> at the ends of the thallus or below the top.



4x

single plant grows on twigs or such.



CURLY FORK MOSS

11. (*Dicranium fuscescens*)

This is another 'cushion' moss, but is smaller than the last species. The light green leaves are about 5 mm. long and are very curly when dry. Each individual plant stands about  $3\frac{1}{2}$  cm. tall without the spore cases.

Curly Fork Moss is quite common on the island, growing on sunny, rough tree bark, sandy soil, or rock outcrops.

As in the lesser Fork Moss, the spore cases are both common and conspicuous. The stalk of the capsule is about  $1\frac{1}{2}$  cm. tall, and the capsule itself is crescent-shaped with a long, pointed cap on the end. When ripe, the capsule is dark brown and the stalk is golden-green.

16. (*Rhacomitrium canescens*)

This plant is distinguished from other mosses by the fine whiteish points on the ends of the leaves, which are especially noticeable when the leaves are dry. When the plant is <sup>wet</sup> ~~dry~~, it looks as if the leaves were growing evenly all up and down the stem, but in dry weather, the leaves form small tufts which are spaced about 2 mm. apart on the stem. The leaves are light green in colour.

Unlike many mosses, this one prefers an open rock outcrop with lots of sunshine and dryness. It has adapted itself to live through the hot dry summer with little or no moisture.

Spore cases are fairly common on this moss, although rather inconspicuous. The blackish-brown capsule stalks are approximately 3 ~~centimetres~~ cm. tall and the capsule itself is about 2 mm. long and is tipped at the end with a cluster of hairs which are in some cases the same length as the capsule. The capsules are almost black when ripe. Rhizoids are very prominent on this moss.

14. (*Rhizocarpon geographicum*)

This beautiful lichen is easily recognized by its lemon-yellow thallus with the black fruiting bodies immersed in it.

This is mainly an alpine lichen, although it is sometimes found on low rocky hills such as Mt. Douglas in Victoria. It ~~often~~ grows on bare exposed rock with other lichens such as *Umbilicaria polyphylla*.



Actual Size

fruiting body



14. (*Denoroalsia abietina*)

The Sword Fern appearance ~~of~~ and the curl of the stem in dry weather are sure means of identification of this moss. The tiny dark green leaves cover both the main stem and the side branches, which are crowded close together and diminish in size towards the top of the main stem. These side branches start about half way up the stem and look just like the leaflets on our common sword fern. When dry, the main stem curls downwards and the side branches fold up close to the stem.

This moss is common on the bark of deciduous trees, especially Garry Oak and Broadleaf Maple. It is also found on the vertical faces of rocks, and sometimes covers quite a large area with its loose mats.

The spore cases, if any are found, grow in midsummer and early fall. The capsules have very short stalks and usually grow in clumps of about six or eight on one plant. They are barrel-shaped, light brown in colour, and white-tipped, <sup>from the main stem</sup> growing on the underside of the plant.



25. (*Antitrichia californica*)

This species has a very scraggley and unkempt appearance. The tiny leaves adhere closely to the stem and branches, and branches sprout out at irregular intervals along the stem. The stems are very thick; the branches are smaller, and the little branchlets which grow from the main branches are no thicker than threads. The stems and branches ~~xxx~~ curve in all directions. In colour, the leaves are light green, yellowish, or greenish-brown.

This moss usually likes open sunny rocks, and will sometimes cover areas of several square feet.

The spore cases are not too common in this species. The brown capsule stem is very short and the capsule is barrel-shaped and is very inconspicuous.



*Conocephalum conicum*

This is a very beautiful and easily-identified liverwort. The broad leaves (about 1 cm. in width) are sometimes more than 10 cm. long and are usually forked and branched. The bright green upper surface is dotted with whitish spots, and a very prominent vein runs down the center.

In this area, fruiting bodies are extremely rare, as most of the reproduction is vegetative.

Like most liverworts, this species likes the water. The ~~only~~ only place around Victoria where I have found it is at Goldstream Provincial Park, growing in the shale rock in shady areas ~~very~~ just above ~~near~~ the surface of the running waters of the stream. The rizoids hold the flat leaves closely to the rock, making them very difficult to remove